MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

Bayer Material Science, LLC
100 Bayer Road
Pittsburgh, PA 15228

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Bayseal SPF & Bayblock Acrylic Coatings over Steel Deck

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 09-0608.01 consists of pages 1 through 9.
The submitted documentation was reviewed by Juan E. Collao, R.A.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Spray Applied Polyurethane Foam
Material:	Polyurethane Foam
Deck Type:	Steel
Maximum Design Pressure:	**-437.5 psf**

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specifications	Product Description
Bayseal 3.0	N/A	TAS 110	Polyurethane spray applied foam that utilizes an HFC blowing agent intended for roofing applications
Bayblock II / Bayblock Base	27 mil thickness	ASTM D 6083	Elastomeric acrylic coating for application over polyurethane spray applied foam.
Bayblock II	N/A	ASTM D 6083	White top base coat of 100% elastomeric acrylic latex coating for spray applied polyurethane foam.
Bayblock Base	N/A	ASTM D 6083	Gray base coat of 100% elastomeric acrylic latex coating for spray applied polyurethane foam.
Bayblock Prime 100	N/A	Proprietary	Single component water based general purpose primer for spray applied polyurethane foam to various substrates.
Bayblock Prime NR	N/A	Proprietary	Single component water based general purpose primer for spray applied polyurethane foam to various substrates.

MANUFACTURING LOCATION:

1. Spring, TX

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

Product	Dimensions	Test Specifications	Product Description	Manufacturer
Any Miami-Dade County Approved Roof Coating	N/A	As Required by Miami-Dade County Product Control Office	Roof coating for application over polyurethane spray applied foam.	Generic (with current Notice of Acceptance)

APPROVED INSULATIONS:

Product Name	Product Description	Manufacturer (With Current NOA)
SECUROCK® Gypsum-Fiber Roof Board	A rigid, gypsum based board stock for use as an overlayment, underlayment or bonding surface.	USG Corporation

APPROVED FASTENERS:

Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
OMG XHD	Truss head, self- drilling, drill point, high thread fastener for use in wood or steel decks.	#15 x 16" max. length; #3 Phillips head	OMG, Inc.
3 in. Ribbed Galvalume Plate	Round galvalume plated steel stress plate with reinforcing ribs for use with OMG fasteners	3" round	OMG, Inc.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name/Report	Date
Trinity Engineering, Inc.	#4680.11.95-1	TAS 114 Appendix "D"	11/29/95
Underwriters Laboratories Inc.	R12134 (N) 90NK28403 TGFU.R12134	UL 1897 UL 790 Fire Classification	12/09/93 03/22/91 02/11/14
Center for Applied Engineering, Inc.	257497	TAS 129 TAS 143	06/06/96
Celotex Corporation Testing Services	257994	ASTM E 96 ASTM D 1623 ASTM C 273 ASTM D 2856	04/23/97 04/14/97 04/14/97 04/25/97
	528639	ASTM D 2842 ASTM D 2126 ASTM D 1621	10/12/98
	520067	ASTM D 6083 ASTM D 522	04/08/99
	520067	ASTM D 6083 ASTM D 2370 ASTM D 1653 ASTM D 471 ASTM D 2196	04/08/99
	520067	ASTM D 6083 ASTM D 4798	05/10/00
	520596	ASTM D 6083 ASTM C 794	04/28/00
Microbac Laboratories, Inc	MLI 98007	ASTM G 21	01/21/99
Factory Mutual	3016938 3022954 3026505	4470	01/13/05 03/24/05 03/21/06
Atlantic & Caribbean Roof Consulting, LLC	09-003 09-002	TAS 114-J TAS 114-D	03/27/09 02/27/09

AMBIENT HUMIDITY APPLICATION LIMITS SPRAYED POLYURETHANE FOAM:

TABLE 1

Maximum Wet Bulb and Relative Humidity for a Given Dry Bulb Reading						
Dry Bulb Temp. (°F)	Wet Bulb Temp. (°F)	R.H. (%)		Dry Bulb Temp. (°F)	Wet Bulb Temp. (°F)	R.H. (%)
45	43	81		73	69	82
46	44	81		74	70	82
47	45	81		75	71	82
48	46	81		76	72	82
49	47	81		77	73	82
50	48	81		78	73	82
51	48	81		79	74	82
52	49	81		80	75	82
53	50	81		81	76	82
54	51	81		82	77	82
55	52	81		83	78	82
56	52	81		84	79	82
57	53	81		85	80	82
58	54	81		86	81	82
59	55	81		87	82	82
60	56	81		88	83	82
61	57	81		89	84	82
62	58	82		90	85	82
63	59	82		91	86	82
64	60	82		92	87	82
65	61	82		93	88	82
66	62	82		94	89	82
67	63	82		95	90	82
68	64	82		96	91	82
69	65	82		97	92	82
70	66	82		98	93	82
71	67	82		99	94	82
72	68	82		100	95	82

Note: Bayseal SPF shall not be sprayed when environmental conditions are beyond the temperature and relative humidity limits listed in this table. (See System Limitations #1)

APPROVED SYSTEMS:

Deck Type 2: Steel

Deck Description: Minimum ASTM A1008 SS Grade 80, 22 gauge steel deck mechanically fastened to structural supports at 6 ft. o.c. with ITW Buildex TRAXX 5 fasteners spaced 6" o.c. along each supports. Deck side laps fastened with ITW Buildex TRAXX 1 fasteners spaced 24" o.c.

System Type A(1): Sprayed polyurethane foam covered with an approved coating adhered to steel deck.

All General and System Limitations apply.

Deck Requirements: Steel decking and attachment thereof shall be in compliance with the Florida Building Code and Roofing Application Standard RAS 109. Deck shall be washed with a trisodium phosphate (TSP) and water solution, rinsed, and allowed to dry.

Surface Preparation: Metal surfaces should be primed with epoxy primer or Bayblock Prime 100 or NR Primer. Primer shall be thoroughly cured prior to application of foam.

For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Bayer Material Science, LLC's recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Bayer Material Science, LLC.

Primers shall be applied in accordance with their manufacturer's instructions. All primers must be thoroughly dry and cured prior to foam application.

Polyurethane Foam Application: The Bayseal SPF shall be applied uniformly over the entire surface at the specified thickness in compliance with the requirements set forth in Florida Building Code Roofing Application Standard RAS 109 but in no case shall it be less than 1" thick. The Bayseal SPF shall be feathered at the edges to produce a smooth transition.

Protective Coating Application: (Choose One) Bayblock II / Bayblock Base elastomeric acrylic coating shall be applied to achieve a minimum dry thickness of 27 mils.

Or

Apply a Miami-Dade County approved roof coating with a current NOA that is compatible with this system and is applied in accordance with the guidelines listed in the products NOA.

Bayseal SPF surface shall be free of moisture, dust, debris, oils, tars, grease or other materials that will impair adhesion of the protective coverings. Any damage or defects to the Bayseal SPF surface shall be repaired prior to the coating application. The base coat shall be applied the same day as the foam when possible. If more than 72 hours elapse prior to the application of the base coat, the polyurethane foam shall be inspected for UV degradation.

Maximum Design Pressure: **-105 psf** (See General Limitation #7)

Deck Type 2: Steel

Deck Description: Minimum 24 gauge 1.5" Type B WR G-90 steel

System Type A(2): Sprayed polyurethane foam covered with an approved coating adhered to steel deck.

All General and System Limitations apply.

Deck Requirements: Steel decking and attachment thereof shall be in compliance with the Florida Building Code and Roofing Application Standard RAS 109. Deck shall be washed with a trisodium phosphate (TSP) and water solution, rinsed, and allowed to dry.

Surface Preparation: Metal surfaces should be primed with Bayblock Prime NR Primer at an application rate of 1 gallon per 300 ft^2. Primer shall be thoroughly cured prior to application of foam.

For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Bayer Material Science, LLC's recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Bayer Material Science, LLC.

Primers shall be applied in accordance with their manufacturer's instructions. All primers must be thoroughly dry and cured prior to foam application.

Polyurethane Foam Application: The Bayseal SPF shall be applied uniformly over the entire surface at the specified thickness in compliance with the requirements set forth in Florida Building Code Roofing Application Standard RAS 109 but in no case shall it be less than 1.5" thick. The Bayseal SPF shall be feathered at the edges to produce a smooth transition.

Protective Coating Application: (Choose One) Bayblock II / Bayblock Base elastomeric acrylic coating shall be applied to achieve a minimum dry thickness of 27 mils.

Or

Apply a Miami-Dade County approved roof coating with a current NOA that is compatible with this system and is applied in accordance with the guidelines listed in the products NOA.

Bayseal SPF surface shall be free of moisture, dust, debris, oils, tars, grease or other materials that will impair adhesion of the protective coverings. Any damage or defects to the Bayseal SPF surface shall be repaired prior to the coating application. The base coat shall be applied the same day as the foam when possible. If more than 72 hours elapse prior to the application of the base coat, the polyurethane foam shall be inspected for UV degradation.

Maximum Design Pressure: **-437.5 psf** (See General Limitation #4)

Deck Type 2: Steel

Deck Description: Minimum 22 gage 1.5" type B G-90 steel deck with ⅝" puddle welds in each flute; with maximum support spans of 6 ft. o.c. Deck side laps are attached with #12 screws spaced 12" o.c.

System Type C(1): Sprayed polyurethane foam covered with an approved coating adhered to insulation mechanically fastened to steel deck.

All General and System Limitations apply.

Deck Requirements: Steel decking and attachment thereof shall be in compliance with the Florida Building Code and Roofing Application Standard RAS 109. Deck shall be washed with a trisodium phosphate (TSP) and water solution, rinsed, and allowed to dry.

Surface Preparation: For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Bayer Material Science, LLC's recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Bayer Material Science, LLC.

Primers shall be applied in accordance with their manufacturer's instructions. All primers must be thoroughly dry and cured prior to foam application.

Insulation Layer	Insulation Fasteners	Fastener Density/ft^2
SECUROCK® Gypsum-Fiber Roof Board		
Minimum ½" thick	OMG XHD fastener & 3" Ribbed Galvalume Plate	1: 1.78

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Polyurethane Foam Application: The Bayseal SPF shall be applied uniformly over the entire surface at the specified thickness in compliance with the requirements set forth in Florida Building Code Roofing Application Standard RAS 109 but in no case shall it be less than 1.5" thick. The Bayseal SPF shall be feathered at the edges to produce a smooth transition.

Protective Coating Application: (Choose One) Bayblock II / Bayblock Base elastomeric acrylic coating shall be applied to achieve a minimum dry thickness of 27 mils.

Or

Apply a Miami-Dade County approved roof coating with a current NOA that is compatible with this system and is applied in accordance with the guidelines listed in the products NOA.

Bayseal SPF surface shall be free of moisture, dust, debris, oils, tars, grease or other materials that will impair adhesion of the protective coverings. Any damage or defects to the Bayseal SPF surface shall be repaired prior to the coating application. The base coat shall be applied the same day as the foam when possible. If more than 72 hours elapse prior to the application of the base coat, the polyurethane foam shall be inspected for UV degradation.

Maximum Design Pressure: **-60 psf** (See General Limitation #7)

SYSTEM LIMITATIONS:

1 Bayseal SPF shall not be sprayed when environmental conditions are beyond the temperature and relative humidity limits listed in Table 1 of this approval. Contractor shall monitor and record environmental conditions in job log in compliance with RAS 109. Job log shall be maintained at the job site and accessible to the Building Official.

2 Adhesion testing of foam to substrate and coating to foam shall be performed in compliance with Roofing Application Standard RAS 109.

3. If mechanical attachment to the structural deck through lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.

2. All work shall performed by a Bayer Material Science, LLC's trained and approved applicator familiar with the details and specifications published by Bayer Material Science, LLC.

3. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.

4. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**

5. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

6. Fastener spacing for mechanical attachment of anchor/base sheet or insulation attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.

7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #4 will not be applicable.)**

8. All approved products listed herein shall be labeled and shall bear the imprint or identifiable marking of the manufacturer's name or logo, city and state of manufacturing facility, and following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.

MIAMI-DADE COUNTY APPROVED

END OF THIS ACCEPTANCE